

Virginia Division of Consolidated Laboratory Services – Richmond, Virginia

FREE CYANIDE in Water by Microdiffusion by ASTM D4282-02 (2010)					
Facility Name: _____ VELAP ID: _____					
Assessor Name: _____ Analyst Name: _____ Inspection Date: _____					
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Was samples preservation: >12 pH (with NaOH), stored in dark, and < 6°C?	10.2.1-10.2.3				
Was the KCN stock standard purchased or prepared and standardized using silver electrode per method?	8.6.1				
Are 4 calibration standards prepared including a zero added standard (initial calibration at least every 6 months or each time reagents prepped)?	11.1				
If only a continuous calibration check perform, are two standard concentrations used (+/- 10%)?	11.2 (15.8.5)				
Are 3 mL of sample pipetted into diffusion cell outer ring?	12.1.1				
Are 1.3 mL of NaOH pipetted into inner ring?	12.1.2				
Is a greased glass plate applied for airtight seal followed by the addition of 0.5 mL of CdCl into outer ring and immediately 1.0 mL K3PO4 into inner ring?	12.1.3-12.1.5				
If the cell tilted and rotated for 15 secs and placed in dark for 4.0 to 8.0 hours?	12.1.6-12.2.7				
Is sample, buffer, and color reagent each added directly to a UV cell (4-5 mixing inversions required after addition of buffer and then after color reagent)?	12.2.1-12.2.3				
Is pyridine-barbituric acid added to cell and time is NOTED and then mixing by 8-10 inversions?	12.2.4				
After 3 min is Absorbance read at 578nm?	12.2.5				
Was a duplicate and known standard analyzed each day and meet satisfactory limits as established by control chart.	15.2				
Notes/Comments:					

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Was a blank and spiked sample analyzed daily? (no acceptance criteria given for BLK, +/- 10% for MS)	15.3 (15.8.5)				
Was one standard analyzed at a frequency of 10%?	15.4				
To monitor precision and bias, were duplicate analyses performed on a standard solution, a sample of known value, a spiked sample a field blank, and a method blank each day (or every 20 routine samples).	15.8.3				
Notes/Comments:					